

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-4, 7-27 are presently active; Claims 13-25 and 27 have been withdrawn from consideration, and Claims 1, 11, and 26 have been presently amended. Claims 5 and 6 were previously canceled without prejudice. No new matter has been added.¹

In the outstanding Office Action, Claims 1-4, 7-12, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshitani et al (U.S. Pat. No. 5,975,098).

Firstly, Applicant acknowledges with appreciation the courtesy of Examiner Riggleman to interview this case with Applicant's representative on September 21, 2007 during which time the rejection over Yoshitani et al and differentiations from Yoshitani et al were discussed as substantially summarized below.

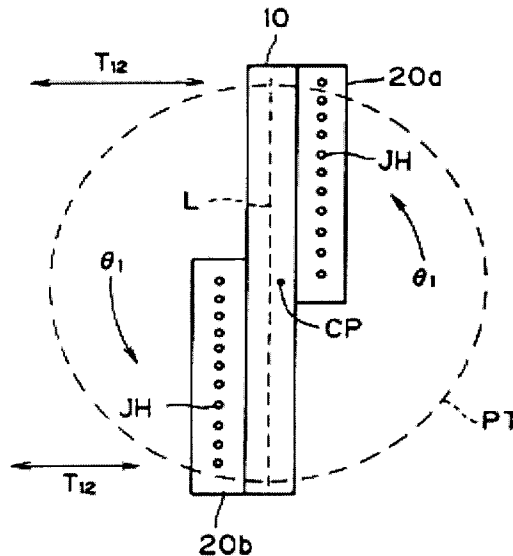
Secondly, in traversing the outstanding U.S.C. § 103(a) rejection, M.P.E.P. § 2143 requires for a *prima facie* case of obviousness that the prior art reference (or references when combined) must teach or suggest all the claim limitations.

During the interview, Applicant's representative pointed out that Yoshitani et al do not show that the high-pressure rinsing nozzles 20a and 20b are aligned with a central axis of the ultrasonic rinsing nozzle 10.

Rather, Yoshitani et al show in Figure 12 (applied in the Office Action for a teaching of multiple nozzle arrays) that nozzle arrays 20A and 20B attached to along beside nozzle array 10. Figure 12 reproduced below for the sake of convenience clearly shows that the center position (denoted as CP) is displaced from either nozzle arrays. The Examiner's attention is also invited to Figure 13 of Yoshitani et al which provides a perspective view of this arrangement.

¹ See Applicant's Figures 3 and 4 and numbered paragraph [0031] of the filed specification.

FIG. 12



To modify Yoshitani et al such that nozzle array 20A or nozzle array 20B would be aligned with the center point CP would require substantial rework of not only the ultrasonic rinsing nozzle 10 and the high-pressure rinsing nozzles 20A and 20B, but also the rinsing tubes 15 and 25. Thus, Applicant submits that one of ordinary skill in the art at the time of the invention would be discouraged from making such a modification to Yoshitani et al.

Moreover, Yoshitani et al disclose that one purpose of the rinsing configuration of Figure 13 is to combine ultrasonic and high pressure rinsing parallel in time “while translating the glass substrate 1 for a liquid crystal display relative to each other.” See Yoshitani et al, col. 15, lines 22-31. To modify Yoshitani et al as described above would render Yoshitani et al unsatisfactory for its intended purpose of cleaning a TFT substrate by a relative translation. With high-pressure rinsing nozzles aligned with the center position CP, the high-pressure rinsing nozzles would not extend across the width of the TFT substrate and, as the TFT substrate was relatively translated, the high pressure rinse would not wash the entire surface of the TFT substrate.

Finally, during the interview, Examiner Riggelman and Applicant's representative discussed Figure 10 of Yoshitani et al. Claim language similar to that discussed during the interview for clarifying Applicant's first nozzle array is presented here for formal consideration. Those changes, while not limiting Applicant's first nozzle array to one nozzle, defines that one nozzle of the first nozzle array is disposed on a central axis extending normally from a center of the substrate. This feature is not disclosed or suggested by Yoshitani et al.'s Figure 10.

Thus, for Yoshitani et al not showing all the claimed elements and for any modification of Yoshitani et al.'s multiple nozzle arrays rendering Yoshitani et al unsuitable for its intended purpose of rising across a width of a TFT substrate, Claims 1, 11, and 26 (and the claims dependent therefrom) are believed to patentably define over the art of record.

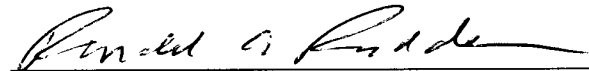
Consequently, in view of the present amendment and in light of the above discussions, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

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Respectfully submitted,

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